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**AMENDMENT TO THE CLAIMS:**

**1. (currently amended)** A method for driving a solid-state image pickup device which stores, in a plurality of photo-electric conversion units, signal charges corresponding to an incident light during a prescribed time period, each of said photo-electric conversion units being provided with an overflow drain (OFD) structure, excludes surplus charges from said photo-electric conversion units by an electric potential barrier, said electric potential barrier being maintained at a first level between said OFD structure and each of said photo-electric conversion units during said prescribed time period, reads out, after cutting off said incident light by a cut-off means such as a mechanical shutter, said signal charges by grouping said photo-electric conversion units into a prescribed number of regions, and outputs image signal from all of the photo-electric conversion units by repeating the read-out procedures, said read-out procedures being carried out during a time period other than said prescribed time period, said read-out procedures comprising the steps of:

cutting off said incident light;

raising up said electric potential barrier to a higher level than said first level after said cutting off of said incident light; and

starting reading out said signal charges.

**2. (previously presented)** The method for driving a solid-state image pickup device according to Claim 1, wherein said electric potential barrier during the read-out step is raised up by a voltage greater than 0.4.V.

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**3-4. (canceled)**

**5. (currently amended)** The method for driving a solid-state image pickup device according to Claim 1, wherein said OFD structure is a vertical OFD structure which excludes the surplus charges from said photo-electric conversion units by said electric potential barrier by a voltage applied to a substrate of said vertical OFD structure, which comprises the steps of:

cutting off said incident light;

raising up said electric potential barrier after said cutting off of said incident light;

and

starting reading out said signal charges.

**6. (previously presented)** The method for driving a solid-state image pickup device according to Claim 5, wherein said electric potential barrier during the read-out step is raised up by a voltage greater than 0.4V.

**7-8. (canceled)**

**9. (currently amended)** The method for driving a solid-state image pickup device according to Claim 1, wherein said OFD structure is a horizontal OFD structure which excludes the surplus charges from said photo-electric conversion units by said electric potential barrier by a voltage applied to a gate of said horizontal OFD structure, which comprises the steps of:

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cutting off said incident light;

raising up said electric potential barrier after said cutting off of said incident light;

and

starting reading out said signal charges.

**10. (previously presented)** The method for driving a solid-state image pickup device according to Claim 9, wherein said electric potential barrier during the read-out step is raised up by a voltage greater than 0.4V.

**11-12. (canceled)**

**13. (previously presented)** The method for driving a solid-state image pickup device according to Claim 1, wherein said signal charges are read-out from said photo-electric conversion units through signal read-out portions and the electric potential of said electric potential barrier during the read-out step is deeper than an electric potential which is applied in signal read-out portion during the times except said read-out step.

**14. (previously presented)** The method for driving a solid-state image pickup device according to Claim 13, wherein the potential different between said electric potential of said electric potential barrier during the read-out step and said electric potential which is applied in said signal read-out portion is greater than 0.4V.

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**15. (previously presented)** The method for driving a solid-state image pickup device according to Claim 5, wherein said signal charges are read-out from said photo-electric conversion units through signal read-out portions and the electric potential of said electric potential barrier during the read-out step is deeper than an electric potential which is applied in signal read-out portion during the times except said read-out step.

**16. (previously presented)** The method for driving a solid-state image pickup device according to Claim 15, wherein the potential difference between said electric potential of said electric potential barrier during the read-out step and said electric potential which is applied in said signal read-out portion is greater than 0.4V.

**17. (previously presented)** The method for driving a solid-state image pickup device according to Claim 9, wherein said signal charges are read-out from said photo-electric conversion units through signal read-out portions and the electric potential of said electric potential barrier during the read-out step is deeper than an electric potential which is applied in signal read-out portion during the times except said read-out step.

**18. (previously presented)** The method for driving a solid-state image pickup device according to Claim 17, wherein the potential difference between said electric potential of said electric potential barrier during the read-out step and said electric potential which is applied in said signal read-out portion is greater than 0.4V.

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**19. (currently amended)** A method for driving a solid-state image pickup device which stores, in a plurality of photo-electric conversion units, signal charges corresponding to an incident light during a prescribed time period, each of said photo-electric conversion units being provided with an overflow drain (OFD) structure, excludes surplus charges from said photo-electric conversion unit by an electric potential barrier, said electric potential barrier being maintained between said photo-electric conversion unit and said OFD structure which is next to said photo-electric conversion unit, reads out, after cutting off said incident light by a cut-off means such as a mechanical shutter, said signal charges by grouping said photo-electric conversion units into a prescribed number of regions, and outputs an image signal from all of the photo-electric conversion units by repeating the read-out procedure, which comprises the steps of:

cutting off said incident light;

raising up said electric potential barrier after said cutting off of said incident light;

and

starting reading out said signal charges.

**20. (previously presented)** The method for driving a solid-state image pickup device according to Claim 19, wherein said electric potential barrier during the read-out step is raised up by a voltage greater than 0.4V.

**21. (previously presented)** The method for driving a solid-state image pickup device according to Claim 19, wherein said signal charges are read out from said photo-electric conversion units through signal read-out portions and the electric potential of said electric

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potential barrier during the read-out step is deeper than an electric potential which is applied in said signal read-out portion during time periods other than said read-out step.

**22. (previously presented)** The method for driving a solid-state image pickup device according to Claim 21, wherein the potential difference between said electric potential of said electric potential barrier during the read-out step and said electric potential which is applied in said signal read-out portion is greater than 0.4V.